



Fig. 1. A gynandromorph of *Culiseta melanura*.

and preceded the collection of this specimen by 6 weeks. This raised the question of whether this phenotype was brought on by environmental stress of the larva (Horsfall and Anderson 1961) or was the expression of a genotype determined independently of the elevated environmental temperatures.

A gynandromorph is a phenotypic expression of a genotype with distinct male and female organs while an intersex, resulting in part or totally from environmental stress, has organs with sexual intergrades (Mayr 1969). In the *Cs. melanura* described above, the antennae, palpa

and genitalia were distinctly male or female, and therefore a gynandromorph rather than an intersex is implied. This is the first published report of an abnormal *Cs. melanura*.

Literature Cited

- Horsfall, W. R. and J. F. Anderson. 1961. Suppression of male characteristics of mosquitoes by thermal means. *Science* 133:1830.
 Mayr, E. 1969. *Principles of Systematic Zoology*. New York: McGraw Hill, 428 pp.

SOME BENEFITS OF PUBLIC PARTICIPATION

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There are many occasions during the mosquito season when individuals have enough mosquitoes at a nuisance level during the evening hours, and still at midday there are not enough mosquitoes located to justify spraying. In order to reduce overtime (inspection during evening hours) the Jackson County Vector Control District started requesting mosquitoes in a container from individuals who requested service.

As these mosquitoes were collected the number, species, and location were recorded. The species would indicate the type of habitat where the mosquitoes originated, which would

indicate to the operator what to look for when searching for the source area. Individuals who took the time and effort to collect mosquitoes in a container were given a high priority. Their calls were returned informing them what and where the mosquito source was, and what action the district would be taking to alleviate the problem.

The policy of requesting the public to collect mosquitoes, and put them in a container saves man hours, makes possible the identification of species, and provides evidence of number of mosquitoes. The policy of informing the person requesting service about the species captured

and where they came from has greatly improved our public image and is one of our better means of public relations.

At the end of the season the information is charted to indicate the day of the service request, the type of mosquito involved and the mean temperature for that 24-hr period. By evaluating the charts the following information was obtained for 1976.

Aedes sierrensis are not active when mean temperatures are below 60°F. Their activity starts at 60°F, and when the temperature reaches 65°F they are very persistent and aggressive in their search for blood meals. *Culex pipiens* are inactive when mean temperatures are less than 71°F. When the mean temperature reaches 73°F they are highly active. *Anopheles freeborni* generally become active when the mean temperature is 60°F or higher.

Cx. tarsalis are inactive when the temperatures are less than 67°F. When the temperature reached 70°F they were actively in search for blood meals. The charts also indicated that in southern Oregon, *Cx. tarsalis* are going into diapause on the first part of September. On a trial basis for two seasons the Jackson County Vector Control District stopped inspecting and larviciding *Cx. tarsalis* source areas the 3rd week of August. The results had no noticeable effect on the number of service requests involving *Cx. tarsalis*.

WYEMYIA HAYNEI IN MARYLAND¹

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Three larvae of *Wyeomyia haynei* Dodge were collected from a pitcher plant, *Sarracenia purpurea*, at Suitland, Prince George's Co., MD on July 22, 1977. These specimens were distinguished from *Wy. smithii* (Coquillett) by the possession of 2 pairs of anal gills with the dorsal gills much reduced, only ca. 1/3 the size of the ventral pair. *Wy. smithii* has only 1 pair of very

bulbous anal gills. Through the courtesy of Dr. Ronald A. Ward, Medical Entomology Project, Smithsonian Institution, the Suitland specimens were compared with specimens of both species identified by Dodge (1947).

We are certain that previously reported records of *Wy. smithii* from Maryland are correct (Bickley et al. 1971). Adult specimens from Anne Arundel, Dorchester and Worcester counties have brown scales on the mid-lobe of the scutellum characteristic of *Wy. smithii*, and larvae from these localities have only 1 pair of anal gills.

As a result of the collection reported here the known distribution of *Wy. haynei* is extended northward. It appears that Maryland is the only state where both *haynei* and *smithii* are known to occur (R. F. Darsie, unpublished).

References Cited

- Bickley, W. E., S. R. Joseph, Jerry Mallack and R. A. Berry. 1971. An annotated list of the mosquitoes of Maryland. *Mosquito News* 31:187-190.
Dodge, H. R. 1947. A new species of *Wyeomyia* from the pitcher plant. *Proc. Entomol. Soc. Wash.* 49:117-122.

INSECTICIDE STRAINER FOR ULV FOG GENERATORS¹

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One of the recurring problems in the operation of our ULV machines, (Leco® Model HD) has been debris in the insecticide line. This dirt is usually introduced into the system by carelessness when the insecticide container is being filled from 5-gal cans. The dirt lodges in the smallest orifices in the insecticide line—the flow control valve and the flowmeter. When this occurs, the flowmeter must be disassembled and cleaned in order to restore correct operation.

In an effort to eliminate this problem, we installed a strainer assembly in the insecticide line between the tank and the flowmeter. This

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